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**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US 09/847,519A**

**DATE: 01/02/2002**  
**TIME: 09:26:46**

**Input Set : A:\422.app**  
**Output Set: N:\CRF3\01022002\I847519A.raw**

**ENTERED**

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3 <110> APPLICANT: Luche, Ralf M.
4      Wei, Bo
8 <120> TITLE OF INVENTION: DSP-14 DUAL-SPECIFICITY PHOSPHATASE
11 <130> FILE REFERENCE: 200125.422
13 <140> CURRENT APPLICATION NUMBER: US 09/847,519A
14 <141> CURRENT FILING DATE: 2001-05-01
17 <160> NUMBER OF SEQ ID NOS: 17
19 <170> SOFTWARE: PatentIn Ver. 2.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 1165
23 <212> TYPE: DNA
24 <213> ORGANISM: Homo sapiens
26 <400> SEQUENCE: 1
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28 cgccggcagg cccccggaca cccagctgca gaaaggagag aaaatccctt ggctctaaaa 120
29 tgacatctgg agaagtgaag acaaagctca agaatgccta ctcatctgcc aagaggctgt 180
30 cggcgaagat ggaggaggaa ggggaggagg aggactactg caccctgtga gcctttgagc 240
31 tggagcggct cttctggaaag ggcagttccc agtacaccca cgtcaacgag gtctggccca 300
32 agctctacat tggcgatgag gcgacggcgc tggaccgcta taggctgcag aaggcggggt 360
33 tcacgcacgt gctgaacgcg gcccacggcc gctgaaacgt ggacactggg cccgactact 420
34 accgcgacat ggacatccag taccacggcg tggaggccga cgacactgccc accttcgacc 480
35 tcagtgtctt cttctacccg gccggcagccct tcatacgacag agcgctaaac gacgaccaca 540
36 gtaagatcct ggttcaactgc gtcatgggcc gcagccggc agccaccctg gtcctggcct 600
37 acctgtatgtat ccacaaggac atgaccctgg tggacgccc cat ccagcaagtg gccaagaacc 660
38 gctgcgtccct cccgaacccgg ggcttttga agcagctccg ggagctggac aagcagctgg 720
39 tgcagcagag ggcacgggtcc cagcgcgcagg acggtgagga ggaggatggc agggagctgt 780
40 agggccgact cacagggcca gcagaggcac ttggggacag agggggagagg cagaacatag 840
41 ccctggccata ggactccaga gaagggatgg tgaaacccaa gctcgactct tccaaaccat 900
42 cttgttcaac ttccccatgt gtgctgggaa cagggaggac ccagagctgc ccccgccag 960
43 agctgagcgc tcagcctctc agcaaaatgg gagggacggg ctcccccggct ctgggtcaca 1020
44 gaggagcatg ccacgctgca ccaagtctcc tgcttgggtt ttgtttttt ggtgagaagg 1080
45 aagagggaaa aagattttta aaatgtgttag gcagtatgtt gtgattaaac gtttggcttt 1140
46 gtccaaaaaaaaaaaaaaa aaaaaaaa 1165
49 <210> SEQ ID NO: 2
50 <211> LENGTH: 220
51 <212> TYPE: PRT
52 <213> ORGANISM: Homo sapiens
54 <400> SEQUENCE: 2
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58 Ala Lys Arg Leu Ser Pro Lys Met Glu Glu Glu Gly Glu Glu Glu Asp
59      20          25           30
61 Tyr Cys Thr Pro Gly Ala Phe Glu Leu Glu Arg Leu Phe Trp Lys Gly
62      35          40          45
64 Ser Pro Gln Tyr Thr His Val Asn Glu Val Trp Pro Lys Leu Tyr Ile
65      50          55          60
67 Gly Asp Glu Ala Thr Ala Leu Asp Arg Tyr Arg Leu Gln Lys Ala Gly

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68	65	70	75	80												
70	Phe	Thr	His	Val	Leu	Asn	Ala	Ala	His	Gly	Arg	Trp	Asn	Val	Asp	Thr
71																95
73	Gly	Pro	Asp	Tyr	Tyr	Arg	Asp	Met	Asp	Ile	Gln	Tyr	His	Gly	Val	Glu
74																110
76	Ala	Asp	Asp	Leu	Pro	Thr	Phe	Asp	Leu	Ser	Val	Phe	Phe	Tyr	Pro	Ala
77																125
79	Ala	Ala	Phe	Ile	Asp	Arg	Ala	Leu	Ser	Asp	Asp	His	Ser	Lys	Ile	Leu
80																140
82	Val	His	Cys	Val	Met	Gly	Arg	Ser	Arg	Ser	Ala	Thr	Leu	Val	Leu	Ala
83	145					150						155				160
85	Tyr	Leu	Met	Ile	His	Lys	Asp	Met	Thr	Leu	Val	Asp	Ala	Ile	Gln	Gln
86																175
88	Val	Ala	Lys	Asn	Arg	Cys	Val	Leu	Pro	Asn	Arg	Gly	Phe	Leu	Lys	Gln
89																190
91	Leu	Arg	Glu	Leu	Asp	Lys	Gln	Leu	Val	Gln	Gln	Arg	Arg	Arg	Ser	Gln
92																205
94	Arg	Gln	Asp	Gly	Glu	Glu	Asp	Gly	Arg	Glu	Leu					
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99	<211>	LENGTH:	19													
100	<212>	TYPE:	PRT													
101	<213>	ORGANISM:	Artificial Sequence													
103	<220>	FEATURE:														
104	<223>	OTHER INFORMATION:	DSP-14 active site													
106	<400>	SEQUENCE:	3													
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108	1				5						10					15
110	Tyr	Leu	Met													
114	<210>	SEQ ID NO:	4													
115	<211>	LENGTH:	24													
116	<212>	TYPE:	PRT													
117	<213>	ORGANISM:	Artificial Sequence													
119	<220>	FEATURE:														
120	<223>	OTHER INFORMATION:	Conserved homology region derived from eight human DSPs													
121	which contains the PTP active site signature motif.															
123	<400>	SEQUENCE:	4													
124	Asn	Gly	Arg	Val	Leu	Val	His	Cys	Gln	Ala	Gly	Ile	Ser	Arg	Ser	Gly
125	1				5						10					15
127	Thr	Asn	Ile	Leu	Ala	Tyr	Leu	Met								
128						20										
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133	<212>	TYPE:	DNA													
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136	<220>	FEATURE:														
137	<223>	OTHER INFORMATION:	Oligonucleotide primer													
140	<400>	SEQUENCE:	5													
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Input Set : A:\422.app  
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144 <210> SEQ ID NO: 6
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150 <223> OTHER INFORMATION: Oligonucleotide primer
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154 cacaaggaca tgaccctggc ggacgcca 28
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158 <211> LENGTH: 22
159 <212> TYPE: DNA
160 <213> ORGANISM: Artificial Sequence
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163 <223> OTHER INFORMATION: Oligonucleotide primer
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170 <210> SEQ ID NO: 8
171 <211> LENGTH: 170
172 <212> TYPE: PRT
173 <213> ORGANISM: Homo sapiens
175 <400> SEQUENCE: 8
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177 1 5 10 15
179 Pro Leu Ser Asn Ser Gln Pro Ser Phe Pro Val Glu Ile Leu Pro Phe
180 20 25 30
182 Leu Tyr Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Glu
183 35 40 45
185 Glu Phe Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn
186 50 55 60
188 Leu Phe Glu Asn Ala Gly Glu Phe Lys Tyr Lys Gln Ile Pro Ile Ser
189 65 70 75 80
191 Asp His Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser
192 85 90 95
194 Phe Ile Asp Glu Ala Arg Gly Lys Asn Cys Gly Val Leu Val His Cys
195 100 105 110
197 Leu Ala Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met
198 115 120 125
200 Gln Lys Leu Asn Leu Ser Met Asn Asp Ala Tyr Asp Ile Val Lys Met
201 130 135 140
203 Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu
204 145 150 155 160
206 Asp Phe Glu Arg Thr Leu Gly Leu Ser Ser
207 165 170
210 <210> SEQ ID NO: 9
211 <211> LENGTH: 168
212 <212> TYPE: PRT
213 <213> ORGANISM: Homo sapiens
215 <400> SEQUENCE: 9
216 Asp Arg Glu Leu Pro Ser Ser Ala Thr Glu Ser Asp Gly Ser Pro Val

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217   1           5           10          15
219 Pro Ser Ser Gln Pro Ala Phe Pro Val Gln Ile Leu Pro Tyr Leu Tyr
220           20           25          30
222 Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Gly Lys Tyr
223           35           40          45
225 Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn Ala Phe
226           50           55          60
228 Glu His Gly Gly Glu Phe Thr Tyr Lys Gln Ile Pro Ile Ser Asp His
229   65           70           75          80
231 Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser Phe Ile
232           85           90          95
234 Asp Glu Ala Arg Ser Lys Lys Cys Gly Val Leu Val His Cys Leu Ala
235           100          105         110
237 Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met Gln Lys
238           115          120         125
240 Met Asn Leu Ser Leu Asn Asp Ala Tyr Asp Phe Val Lys Arg Lys Lys
241           130          135         140
243 Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu Asp Phe
244 145           150          155         160
246 Glu Arg Thr Leu Gly Leu Ser Ser
247           165
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251 <211> LENGTH: 157
252 <212> TYPE: PRT
253 <213> ORGANISM: Homo sapiens
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257   1           5           10          15
259 Ile Leu Pro Asn Leu Tyr Leu Gly Ser Ala Arg Asp Ser Ala Asn Leu
260           20           25          30
262 Glu Ser Leu Ala Lys Leu Gly Ile Arg Tyr Ile Leu Asn Val Thr Pro
263           35           40          45
265 Asn Leu Pro Asn Phe Phe Glu Lys Asn Gly Asp Phe His Tyr Lys Gln
266           50           55          60
268 Ile Pro Ile Ser Asp His Trp Ser Gln Asn Leu Ser Arg Phe Phe Pro
269   65           70           75          80
271 Glu Ala Ile Glu Phe Ile Asp Glu Ala Leu Ser Gln Asn Cys Gly Val
272           85           90          95
274 Leu Val His Cys Leu Ala Gly Val Ser Arg Ser Val Thr Val Thr Val
275           100          105         110
277 Ala Tyr Leu Met Gln Lys Leu His Leu Ser Leu Asn Asp Ala Tyr Asp
278           115          120         125
280 Leu Val Lys Arg Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met
281           130          135         140
283 Gly Gln Leu Leu Asp Phe Glu Arg Ser Leu Arg Leu Glu
284 145           150          155
287 <210> SEQ ID NO: 11
288 <211> LENGTH: 170
289 <212> TYPE: PRT

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Input Set : A:\422.app  
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290 <213> ORGANISM: Homo sapiens  
 292 <400> SEQUENCE: 11  
 293 Gly Leu Cys Glu Gly Lys Pro Ala Ala Leu Leu Pro Met Ser Leu Ser  
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 296 Gln Pro Cys Leu Pro Val Pro Ser Val Gly Leu Thr Arg Ile Leu Pro  
 297 20 25 30  
 299 His Leu Tyr Leu Gly Ser Gln Lys Asp Val Leu Asn Lys Asp Leu Met  
 300 35 40 45  
 302 Thr Gln Asn Gly Ile Ser Tyr Val Leu Asn Ala Ser Asn Ser Cys Pro  
 303 50 55 60  
 305 Lys Pro Asp Phe Ile Cys Glu Ser Arg Phe Met Arg Val Pro Ile Asn  
 306 65 70 75 80  
 308 Asp Asn Tyr Cys Glu Lys Leu Leu Pro Trp Leu Asp Lys Ser Ile Glu  
 309 85 90 95  
 311 Phe Ile Asp Lys Ala Lys Leu Ser Ser Cys Gln Val Ile Val His Cys  
 312 100 105 110  
 314 Leu Ala Gly Ile Ser Arg Ser Ala Thr Ile Ala Ile Ala Tyr Ile Met  
 315 115 120 125  
 317 Lys Thr Met Gly Met Ser Ser Asp Asp Ala Tyr Arg Phe Val Lys Asp  
 318 130 135 140  
 320 Arg Arg Pro Ser Ile Ser Pro Asn Phe Asn Phe Leu Gly Gln Leu Leu  
 321 145 150 155 160  
 323 Glu Tyr Glu Arg Thr Leu Lys Leu Leu Ala  
 324 165 170  
 327 <210> SEQ ID NO: 12  
 328 <211> LENGTH: 168  
 329 <212> TYPE: PRT  
 330 <213> ORGANISM: Homo sapiens  
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 334 1 5 10 15  
 336 Pro Arg Val Pro Ile Tyr Asp Gln Gly Gly Pro Val Glu Ile Leu Pro  
 337 20 25 30  
 339 Tyr Leu Tyr Leu Gly Ser Cys Asn His Ser Ser Asp Leu Gln Gly Leu  
 340 35 40 45  
 342 Gln Ala Cys Gly Ile Thr Ala Val Leu Asn Val Ser Ala Ser Cys Pro  
 343 50 55 60  
 345 Asn His Phe Glu Gly Leu Phe His Tyr Lys Ser Ile Pro Val Glu Asp  
 346 65 70 75 80  
 348 Asn Gln Met Val Glu Ile Ser Ala Trp Phe Gln Glu Ala Ile Ser Phe  
 349 85 90 95  
 351 Ile Asp Ser Val Lys Asn Ser Gly Gly Arg Val Leu Val His Cys Gln  
 352 100 105 110  
 354 Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Ile Gln  
 355 115 120 125  
 357 Ser His Arg Val Arg Leu Asp Glu Ala Phe Asp Phe Val Lys Gln Arg  
 358 130 135 140  
 360 Arg Gly Val Ile Ser Pro Asn Phe Ser Phe Met Gly Gln Leu Leu Gln  
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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/847,519A

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